Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently Amended) A computer-implemented method of validating metadata for an object model stored in a database, comprising:

identifying a first subject of validation, wherein the first subject is one of an object, an attribute, an association and a collection of objects;

determining a context of metadata validation based on the first subject, the context including one of a) the first subject, and b) the first subject and one or more additional subjects;

querying the database to retrieve a list of objects requiring validation, the list of objects determined by the first subject of validation and the determined context;

querying the database to retrieve ~~determining~~ one or more validation rules for each object in the list of objects; and ~~subject in the context; and~~

applying the ~~determined~~ validation rules to each object in the list of objects,

wherein applying the ~~determined~~ validation rules results in one of partially and completely validating the metadata for the object model, a partial validating of the object model allowing an existing portion of the metadata to be validated before all metadata for the object model is determined, and ~~wherein applying the determined validation rules~~ occurs prior to deployment of the object model, a deployment of the object model allowing the object model to be used to store data according to the object model.

2.   (Previously Presented) The method of claim 1, wherein each subject is a metadata object selected from the group consisting of a MetaAttribute, a MetaAssociation, a MetaAssociationEnd, a MetaClass and a MetaCollection.

3.   (Original) The method of claim 1, wherein identifying includes receiving an indication from a user interface module, said indication identifying the first subject.

4.   (Original) The method of claim 1, wherein identifying includes receiving an indication from a configuration management module, said indication identifying the first subject.

5.   (Original) The method of claim 1, wherein identifying includes receiving an update indication identifying the first subject in response to a modification of the first subject.

6.   (Previously Presented) The method of claim 1, wherein each of the one or more validation rules is one of a correctness type rule and a completeness type rule, a correctness validation rule operable to be applied while partially validating the object model and a completeness validation rule operable to be applied while completely validating the object model.

7.   (Original) The method of claim 1, wherein the first subject is a root object for a collection of associated objects.

8.   (Original) The method of claim 7, wherein the collection of objects is a deployable collection including all objects transitively associated with the root object.

9.   (Original) The method of claim 7, wherein the collection of objects is an aggregated collection including the root object and all of its strongly aggregated child objects recursively.

10.   (Original) The method of claim 1, wherein determining a context includes:

a) traversing all associations with a root object to identify target objects;

b) repeating a) for each target object, with each target object as the root object;
and

c) generating a list of all target objects, wherein said list of objects represents a
transitive closure based on the root object.

11.   (Original) The method of claim 10, wherein determining a context is
implemented using queries written in the Java language or a meta-language (METALANG) or
both.

12.   (Original) The method of claim 10, wherein the list of objects forms the
context for validation.

13.   (Original) The method of claim 10, wherein the first subject is the root
object.

14.   (Original) The method of claim 1, wherein determining one or more
validation rules includes identifying rules in rule files based on the subject type of each subject to
be validated.

15.   (Original) The method of claim 14, wherein each rule file is a Java file.

16.   (Original) The method of claim 1, wherein each subject in the context is
one of an instance of an object, an instance of an object containing an attribute, an instance of an
object having an association and an instance of root object of a deployable unit of a collection of
objects.

17.   (Currently Amended) A metadata validation system for validating an object model, comprising:

a database that stores objects and metadata of the object model;

means for identifying a first subject of validation, wherein the first subject type is one of an object, an attribute, an association and a collection of objects;

means for determining a context of metadata validation based on the first subject, the context including one of a) the first subject, and b) the first subject and one or more additional subjects;

means for querying the database to retrieve a list of objects requiring validation, the list of objects determined by the first subject of validation and the determined context;

means for querying the database to retrieve ~~determining~~ one or more validation rules for each object in the list of objects; and ~~subject in the context; and~~

means for applying the ~~determined~~ validation rules to each object in the list of objects, ~~subject in the context,~~

wherein the means for applying the ~~determined~~ validation rules provides for both partially and completely validating the metadata for the object model, a partial validating of the object model allowing an existing portion of the metadata to be validated before all metadata for the object model is determined, and ~~wherein the means for applying the determined validation rules~~ provides for the validation occurring prior to deployment of the object model, a deployment of the object model allowing the object model to be used to store data according to the object model.

18.   (Previously Presented) The system of claim 17, wherein each subject is a metadata object selected from the group consisting of a MetaAttribute, a MetaAssociation, a MetaAssociationEnd, a MetaClass and a MetaCollection.

19.   (Currently Amended) A method of validating metadata in an object model in a database, the method comprising:

receiving user defined rules, each rule defining a validation rule on a metadata object, each rule being one of a completeness type rule and a correctness type rule;

storing the validation rules to the database;

identifying a first subject of metadata validation, wherein the first subject has a subject type selected from the group consisting of an attribute, an association, an object and a collection of objects;

determining a context of validation based on the first subject, wherein the context includes the first subject and none, one or more additional subjects; ~~and~~

querying the database to retrieve a list of objects requiring validation, the list of objects determined by the first subject of validation and the determined context;

applying a correctness type validation rule to each object in the list of objects ~~of the first and additional subjects~~ when only a portion of the metadata is determined; and

applying a correctness type and a completeness type validation rule to each object in the list of objects ~~of the determined first and additional subjects~~ when all of the metadata is determined,

wherein applying the correctness type or the completeness type validation rule occurs prior to deployment of the object model, a deployment of the object model allowing the object model to be used to store data according to the object model.

20.   (Previously Presented) The method of claim 19, wherein each subject is a metadata object selected from the group consisting of a MetaAttribute, a MetaAssociation, a MetaAssociationEnd, a MetaClass and a MetaCollection.

21.   (Original) The method of claim 19, wherein identifying a first subject includes receiving an indication from one of a user interface module and a configuration management module, the indication identifying an instance of an object in the database.

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22.   (Original) The method of claim 19, wherein the first subject is a root object for a collection of associated objects.

23.   (Original) The method of claim 22, wherein the collection of objects is one of a deployable collection including all objects transitively associated with the root object and an aggregated collection including the root object and its child objects, wherein the child objects are objects that are strongly aggregated to the root object recursively.

24.   (Original) The method of claim 22, wherein determining a context includes:

a) traversing all associations with the root object to identify target objects;

b) repeating a) for each target object, with each target object as the root object; and

c) generating a list of all target objects, wherein said list of objects represents a transitive closure based on the root object.

25.   (Original) The method of claim 19, wherein determining one or more validation rules includes identifying rules in rule files based on the subject type of each subject to be validated.

26.   (Original) The method of claim 19, wherein storing the validation rules to the database includes:

storing metadata describing the validation rules to the database; and

storing the validation rules to one or more Java files.